The Air Force Historical Research Agency (AFHRA) developed the database to assist in trend analysis of USAF force structure for USAF wing or wing equivalent (hereafter referred to as wing/equivalent) organizations having flying, missile or space missions. For the purpose of this database, a wing/equivalent is any organization at, above, or below wing level with one or more operations squadrons assigned to it. Some examples are numbered air divisions and World War II combat groups. The wing/equivalent organizations counted in this database are collectively classified as operations wings, and their cumulative total is a traditional measure of annual force strength of the U.S. Air Force. Covering the period from 1939, these tables depict the number and type of operations wings/equivalents as of the last day of each calendar year. In total they present a timeline indicating periods of expansion and contraction of the U.S. Air Force and the introduction of major missions and weapons systems.

The compilers of these tables have deliberately avoided use of the traditional categories of combat, combat support, and support units, because the arbitrary and changing criteria used to determine them have often distorted reality. For example, in World War II, the Army Air Forces defined all ferrying groups delivering aircraft to combat organizations as support units despite the fact that some groups delivering to overseas locations risked hostile attack from enemy air and ground forces. During the Vietnam War, the Air Force classified tactical airlift wings stationed in Southeast Asia as combat support units and military airlift wings involved in intertheater air transport as support units. In fact, both types were exposed to enemy ground fire. Given the subjectivity inherent in judgments of combat and combat support categories, the compilers determined that classification by specific functional grouping would be more useful.

Thus, organizations are described by their functions using contemporary nomenclature to avoid confusion over roles and missions. For example, consistently throughout the database, "Flying Training" is used to describe organizations once known as "Pilot Training" units, and "Airlift" is used to describe organizations formerly called "Air Transportation," "Troop Carrier," and "Combat Cargo." Even so, AFHRA researchers often had to exercise individual judgement in determining exactly which category to place a given operations wing. Additionally, they assumed the designation of a wing described its mission, although at times a designation did not necessarily match the primary mission. Thus, a bomb wing assigned a training mission is still identified as a bomb wing. Similarly, a wing assigned operations squadrons with different but associated functions-a bomb wing with refueling squadrons, for example-is still identified by its own function. The "Composite" category includes wings/equivalents deliberately created to perform more than one major function. Such an organization usually bore the composite designation but not always. Examples include the 1960s era strategic wings that were assigned bomb, refueling, and intercontinental ballistic missile squadrons. The "Other" category served as a catch-all for wing/equivalent organizations if they had missions that did not fit the other categories and if the researchers deemed the operations wings not numerous enough to warrant a separate category. Wing/equivalent organizations with helicopter and liaison flights and squadrons in the late 1940s
and early 1950s, electronic warfare squadrons in 1960s and 1970s, and airborne command and control squadrons since the 1960s all were counted as "Other."

The database locates USAF wings/equivalents in either the Continental United States (CONUS) or overseas. Operations wings based in Hawaii and Alaska were counted under the "Overseas" column until 1959, when these territories were admitted to the Union as states; beginning that year they were counted as CONUS-based organizations. Wings/equivalents stationed in other U.S. possessions, such as Puerto Rico, are in the "Overseas" column. While AFHRA historians were able to count both USAF active force and reserve wings/equivalents, they could only determine the Air National Guard units that were mobilized for federal service. The column labeled "Mob. ANG" counts these mobilized organizations.

The tables portray data taken from official sources, but statistics should be considered approximations of the actual force structure for several reasons. First, end-of-year data often reflected force structure at the end of the preceding quarter. Second, reporting officials did not distinguish between active and manned units, and units that were active but unmanned, particularly with regard to reserve units that existed through the mid-1970s. Also, for data prior to 1979, AFHRA historians often had to collate information using several sources to arrive at reasonable estimates of the force structure. The post-1979 tables in total are much more accurate, being based on actual organizational actions as reflected in Department of the Air Force letters and implementing general orders from appropriate headquarters. Because the number of squadrons assigned in any given year to wings/equivalents could vary considerably over time, no arbitrary measure of a certain number of squadrons per wing/equivalent could be made. Consequently, the compilers of the database counted each wing/equivalent organization having one or more assigned operations squadrons.